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| 10/828,381 | 04/20/2004 | David Lawrence Phillips | 16599-US | 4821 |
| 30689 | 7590 | 01/30/2006 | | |
| DEERE & COMPANY ONE JOHN DEERE PLACE MOLINE, IL 61265 | | | EXAMINER TORRES, ALICIA M | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 3671 | |

DATE MAILED: 01/30/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Claim Objections

1. Claim 5 is objected to because of the following informalities: claim 5 depends from cancelled claim 4. Appropriate correction is required.

Claim 11 objected to because of the following informalities: there is lack of antecedent basis for “the center row”. Appropriate correction is required.

DETAILED ACTION

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 11 and 18 are rejected under 35 U.S.C. 102(b) as being anticipated by Akgulian et al. 3,731,469.

Akgulian discloses an apparatus comprising:

- A ladder-type chassis (10) having left and right rails
- Front wheels (12)
- A first row of two cutting units (11) mounted to pivotable arms (13) in front of the front wheels (12)
- A second row of three cutting units (11) mounted to pivotable arms (16, 44) behind the front wheels (12), and as best as the examiner can tell, the second or “center” row has a cutting unit (11, see Figure 1) positioned between the left and right rails (of chassis 10)

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- An operator module (not shown) mounted behind the second row of cutting units (11)
- Driven and steered rear wheels (unnumbered)
- The pivotable arms (16, 44) of the second row used for raising and rotating two cutting units (11) to a full, vertical position within the widest track of the wheels (12)
- A power supply (17) mounted behind the operator module and rear wheels.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1, 2, 5, 7-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ronning 1,957,079 in view of Akgulian et al. 3,613,337 and Rhoades et al. 2,924,928.

Ronning discloses an apparatus comprising:

- a chassis having left and right rails (56)
- a pair of front wheels (15)
- a pair of rear wheels (12) having a track width and diameter greater than that of the front wheels (15)
- an operator module (13)
- portions of the left and right rails (56) extending from under the operator module (13) to define an uncovered area at least 5 square feet in area between the rails (56) near the front of the chassis

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- a first row of two cutting units (A, B) mounted to horizontally extending arms in front of the pair of front wheels (15)
- a second row of three cutting units (C, D, E)
- one of the cutting units (D) in the second row is positioned entirely in the uncovered area
- the other two cutting units (C, E) in the second row mounted to horizontally extending arms, as per claims 1, 8 and 9
- wherein the cutting units (A-E) are reels rotating on horizontal axes, as per claim 2
- an internal combustion engine (11), as per claims 5.

However, Ronning fails to disclose wherein the horizontally extending arms are lift arms; wherein the lift arms pivot to lift the two cutting units to a transport position inside the track width of the pair of rear wheels; and

wherein the second row of cutting units are behind the pair of front wheels; and

wherein the power supply is at least partially behind the rear wheels, as per claim 1; and

wherein the rear wheels are steered, as per claim 7; and

wherein the cutting units are non-pivotable through a vertical axis, as per claim 10.

Akgulian '337 discloses a similar device wherein the horizontally extending arms () are lift arms;

wherein the lift arms (42) pivot to lift the two cutting units (29, 30) to a transport position inside the track width of the pair of rear wheels (14); and

wherein the second row of cutting units (29, 30) are behind the pair of front wheels (16), as per claim 1; and

wherein the rear wheels (14) are steered, as per claim 7; and

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wherein the cutting units (27-30) are non-pivotable through a vertical axis, as per claim 10.

Rhoades discloses a mower having an engine (20) mounted at least partially behind the rear wheels (8, 9).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to include the lift arms of Akgulian on the device of Ronning in order to provide a transportation configuration.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to include the rear mounted engine of Rhoades in the mower of Ronning in order to prevent the driver from being exposed to the engine's heat and fumes.

6. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ronning, Akgulian '337 and Rhoades as applied to claim 1 above, and further in view of Bednar et al. 6,336,312.

The device is disclosed as applied to claim 1 above. However, the combination fails to disclose wherein the cutting units are rotary blades rotating on generally vertical axes.

Bednar discloses a similar gang mower wherein the cutting units (34) are rotary blades rotating on generally vertical axes.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to include the rotary mowers of Bednar on the gang mower of Ronning, Akgulian and Rhoades in order to require less maintenance.

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7. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Akgulian in view of Ronning 1,957,079, as cited by Applicant.

The device is disclosed as applied above. However Akgulian fails to disclose:

- A portion of the rails under the operator module and power supply
- A front portion of the rails being uncovered, as per claim 12.

Ronning discloses a similar device including:

- A portion of the rails under the operator module (13) and power supply (11)
- A front portion of the rails (56) being uncovered, as per claim 12.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to include the rail structure of Ronning on the device of Akgulian in order to allow floating action of the cutting units.

8. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Akgulian and Ronning in view of Worthington 1,330,293, as cited by Applicant.

The device is disclosed as applied above. However, Akgulian fails to disclose the parallel rails being farther apart at the front.

Worthington discloses a similar apparatus wherein the rails (1) are closer at the front.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to include the rail structure of Worthington on the apparatus of Akgulian and Worthington in order to unite the cutting units.

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9. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Akgulian in view of Hornung 6,684,616

The device is disclosed as applied above. However, Akgulian fails to disclose a hood having a screened air intake over the power supply.

Hornung discloses a similar device including a hood (20) over the power supply (11) having a screened air intake (24).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to include the hood of Hornung on the device of Akgulian in order to cool the engine.

10. Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Akgulian in view of Gerzanich 4,341,059.

The device is disclosed as applied above. However, Akgulian fails to disclose wherein the pair of front wheels are non-driven and non-steered.

Gerzanich discloses a similar vehicle wherein the pair of front wheels are non-driven and non-steered.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to include the non-powered front wheels of Gerzanich on the device of Akgulian in order to provide adequate traction force to the powered wheels.

11. Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Akgulian in view of Speiser 3,410,063.

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The device is disclosed as applied above. However, Akgulian fails to disclose wherein the operator module is pivotably mounted to the chassis.

Speiser discloses a similar device wherein the operator module (140) is pivotably mounted to the chassis (103).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to include the pivotable operator module of Speiser on the device of Akgulian in order to comfortably accommodate deferent users.

12. Claims 19 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ronning in view of Rhoades.

Ronning discloses an apparatus comprising:

A chassis being partially covered by an operator module (13) and a power supply (11) and having a pair of rails (56, see Figure 5);

Front (15) and rear wheels (12), one pair being steerable and driven by the power supply (11), the rear wheels (12) have a greater track width than the front (15) pair of wheels;

A first row of two cutting units (A, B), in front of a second row of three cutting units (C, D, E), the cutting units being mounted on arms (75) extending laterally from the chassis and being uncovered by the operator module (13) and power supply (11);

One cutting unit (D) is entirely between the rails (56);

The cutting units (A-E) are within the track width of the rear wheels (12) in a transporting position.

However, Ronning fails to disclose wherein the operator module is in front of the power supply and the power supply is primarily behind the rear wheels.

Rhoades discloses a mower having an engine (20) mounted at least partially behind the rear wheels (8, 9).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to include the rear mounted engine of Rhoades in the mower of Ronning in order to prevent the driver from being exposed to the engine's heat and fumes.

Response to Arguments

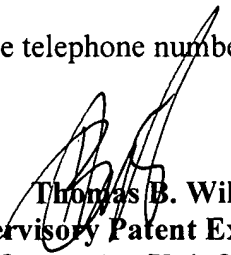
13. Applicant's arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alicia M. Torres whose telephone number is 571-272-6997. The examiner can normally be reached Monday through Thursday from 7:00 a.m. – 4:30 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas B. Will, can be reached at 571-272-6998.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the group receptionist whose telephone number is 703-305-1113. The fax number for this Group is 571-273-8300.


Thomas B. Will
Supervisory Patent Examiner
Group Art Unit 3671

AMT January 22, 2006